THE QL REPORT

This is our second Report using Digital Precision's DESKTOP PUBLISHER (DP) only this time we are actually writing the Report from within DP with the help of SPELLBOUND. The two so far seem to work fine together. As we have said before, we dislike the fact that DP will not word-wrap but that is the only thing that makes the program slightly frustrating to use. SPELLBOUND ensures that we are not making any spelling mistakes and we do like the look that DP gives to the Report.

As you may have noticed in last month's Report, we made a fair amount of errors. The first page, for example, was too "short" and in a few instances, when we imported text, we had an extra line in a few paragraphs which did not, we admit, look very professional. We have also noticed that when using SPELLBOUND, every time we use hat word, it types it twice which is strange. When you save the page, the window showing the mode SPELLBOUND is in and the word "checking" is also saved. As long as you enter more text later, this will disappear. Or, you can usually have it low enough on the page to "white it out" as a last resort.

So, here we are with real desktop publishing on the QL! And able to be used in conjunction with a spelling checker/corrector at the same time. One of the stronger selling points about the QL has always been its excellence in the field of word-processing. This could now be enhanced with the desktop programs now becoming available.

OTHER NEWS

In the news department, we keep hearing rumours that Amstrad "may" want to do something with the QL but officially they say "no decision has been made."

We are hearing from a lot of third party people that Futura is strictly vapourware and will never be released. Sandy insists the machine will be out by the end of summer.

We know of a certain dealer who is advertising the QL in such "non Sinclair" publications as DR. DOBBS JOURNAL with a suggested retail of $289! Nice if you can get it. All other dealers and even the distributor are selling the machine right around the $199.95 suggested retail that has been the current price for over a year.

The price of QL TALKER has been reduced to $39.95 plus a little for shipping. At this price, it is a very good buy. The sound on the TALKER is excellent and it is very easy to incorporate speech into your own programs.

THERE'S BUGS IN MY SUPER
PART ONE BASIC

Digital Precision has a sheet with the above-mentioned name that Is most known bugs and what the "fix" is for each, if any. We will list some of them in this Report and finish the list either next month or the month after. We hope it proves beneficial.

We will list in this issue a description of the bugs that DO NOT have a fix. In other words, proceed under penalty of loss of program, data, etc.

DESCRIPTION FIX

WHEN as an immediate command can crash BASIC. **DON'T DO IT!**

Deleting a WHEN statement can crash BASIC. **DON'T DO IT!**

WHEN interacts badly with RENUM. **DON'T DO IT!**

NEW does not clear WHEN ERROR **DON'T DO IT!**

MRUNning a file of direct commands causes various problems. **DON'T DO IT!**

'BAD LINE' IN file of direct commands can crash the machine. **DON'T LET IT HAPPEN!**

Trying to jump out of a procedure with an END REP can cause problems. **DON'T DO IT!**

Floating point arrays are limited to 64k elements. **DON'T DO IT!**

Most of these bugs are in the JM, JS, JSU, and MG ROMS. The last one mentioned is only in the JM.

EIDERSOFT TROUBLES???

When we received a recent order from Digital Precision, Freddy Vacha had scribbled on the bottom of the invoice, "Friendly tip— Eidersoft in trouble." Eidersoft was one of the first companies to support the QL and has produced some excellent QL software and hardware— I.C.E., Qspell, Karate, ICICLE, their Mouse System, and were listed as the U.K. distributor for CST's THOR. They had concentrated more in the past year on Atari ST software and hardware. Their ST version of Karate, which was based on the QL version, did very well both here and in England and Europe.

Another source informed us that as of Friday, July 17th, they had folded. We have telexed Ken Browning, the director. We know that Eidersoft has recently released some excellent utility programs for the ST, among them a sprite designer and a sound designer.

The latest rumour we have heard is that PCML is offering Eidersoft creditors 40 pence on the pound and will control all Eidersoft concerns. We have not been able to ascertain whether or not this means there will still be Eidersoft product for the QL available or not.

RLE AND DESKTOP

RLE stands for Run-time encoded graphics and we first did an article on it in an issue of QLR last year. We printed a listing by Horn Lehfeldt which enabled you to down-load pictures from Compuserve (they have a whole section for screen pictures of all types) onto your monitor. With one of many of the screen dump programs available you could then get a hardcopy via your printer.

DESKTOP has a "load picture" feature which we will attempt to describe to you now. Chuck Platt, one of our reviewers, sent us some RLE pictures from Compuserve. From within DESKTOP, choose the "load picture " option and then choose the option for "full screen " as opposed to the one which asks for an EYEQ screen. Once the screen is loaded, you can "cut" any portion of it you desire, or turn it upside down, mirror it, etc. Below is an RLE picture which most of you should recognize.

Once I get the picture of Uncle Clive on screen I can then clip it to whatever size I want. When I am done, I press the escape key and the picture is cut into memory. After that, whenever I want to use the picture, I simply press the CONTROL, SHIFT and "X" keys after positioning the cursor at the desired position and the picture is cut in as you see here. By properly positioning windows for text, you can create the illusion(almost) of the text "wrapping around" the picture. All in all with the ability to pull in graphics from RLE pictures, DESKTOP can create a very professional looking newsletter, catalog or whatever. We have been using the program for less than a month but already feel very comfortable with it.

Remember Compuserve has a huge library of pictures. Browse through it sometime.

★★★ D.I.Y. KEYBOARD by James Cook ★

Since an interest had been expressed in a lower priced replacement keyboard for the QL, I determined to attempt to build one. The following will relate my experience.

Having acquired a QL about a year and a half ago, I set about becoming familiar with Super Basic. Having acomplished this (more or less), I recently purchased a Sandy Super Q Board with all the goodies that go with it.

I now had everything available but a mouse and a good keyboard. The mouse can be retrofitted later, and may well be at some time.

The feel of the QL keyboard was not great, but tolerable. The thing that was intolerable was the strange placement of the cursor keys. It also would have been nice to have control and alt keys on either side of the keyboard to use with either hand. The time had come to correct the problem if possible. A look at what was available commercially showed that either the replacement keyboard was not much better than the original, or the price was too high, or both. Having successfully built one for a Timex 2068 and a Timex 1000 , the decision was made to build one for the QL. I am happy to report that the project was successful, and the total cost was less than $15.00.

While browsing through a computer surplus store in Santa Ana Ca. a nice keyboard with mechanical key switches was obtained for $5.00. The keyboard had a numeric pad, a cursor pad and function keys. Some of the keytops were missng, but suitable keytops were used from a Coleco Adam keyboard (wich is a membrane type like the one on the QL and is useless for anything else).

Be particularly careful when selecting a keyboard and be sure to get one with mechanical key switches, and not one with capacitive or hole effect switches. While the others are very durable, they won't work. The mechanical key switches will have two terminals on each switch and will show continuity with an ohm meter when the later is connected across a depressed key switch. The other types will have three or more terminals. Avoid them. The size of the keyboard is not important, as it will be mounted remotely from the computer. You might be able to mount the QL in the keyboard case, but it will require considerable work on your part. Jameco Electronics has some keyboards in their current catalog which should be suitable. Look for the words "mechanical key switches" in the description, and avoid the Adam or the late TI99 keyboards (the last is a little tip based on my own personal experience).

Having obtained a suitable keyboard you will have to beg, build, buy or steal a suitable case for the keyboard. I was given two I.B.M terminals with keyboards. The terminals yielded one good 15" black and white monitor with a high persistance tube (no flickers), two good Rotron fans, a couple of power supplies that could run a small city or anchor a large cabin cruiser, and two remote keyboards.

The keyboards were Hale effect and unuseable (sigh, they sure have a nice touch), but the keyboard case was suitable for installing the surplus keyboard. In adition the keyboard case had a 23 wire shielded cable with a DB25 25 pin computer connector. That cable was used as a connector to the computer. The keyboard matrix diagram in the QL repair manual was used to wire up the new keyboard. In doing so, two errors were discoveredin that diagram. Key "1" should be in row 4 column 4 not in row 4 column 3 as shown in the diagram. Key "3" should be in row 4 column 3 and not row 4 column 4. Key "0" should be in row 3 column 8, and key "9" should be in row 3 column 9. The diagram shows the reverse of this.

The numeric pad keys are connected in parallel with their counterparts in the upper row of keys. The backspace key is also connected in parallel with the left cursor key. The keys on either side of the space bar were connected in parallel as control keys. In addition parallel alt keys are connected on either side of the keyboard.

The function keys on this keyboard are above the top row of regular keys, using the large function keytops for the Adam keyboard. You can put them wherever you wish, as long as they are wired correctly. On my keyboard the function keys were already above the main keyboard. There is considerable flexability in how you arrange the cursor keys and special keys. You could, in fact wire the keyboard in a Dvorak arrangement.

The only "cute trick" that was included on this keyboard was a dedicated DELETE key which when pressed, actuates the control key with a relay, and a moment
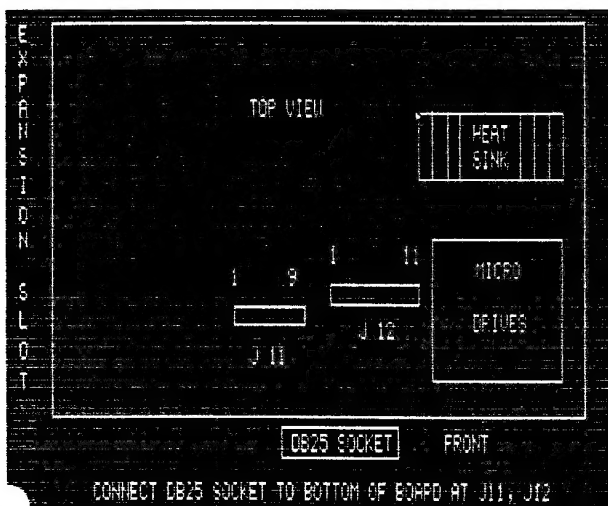
later actuates the left cursor key with another relay. The sequence is very important, as if the cursor key is actuated before the control key, the delete character will not be generated.

To do this a double pole dip relay (available from Radio Shack) was used to actuate the control key and the second set of contacts on the relay actuate a single pole dip relay (Also available from Radio Shack) which actuates the left cursor key. Since the second relay can not pull in until the first one does, there is enough delay to assure the correct sequence. The same thing could probably be done with Quad Analog Switch Integrated circuits, but this crude method works very well. Four AA pencells in a holder are used to power the relays, but you could probably steal power from the computer if you wish. The pencells should last a long time in normal use, as they are only used while the DELETE key is actually depressed.

This same arrangement can be expanded to include a Right delete key using the right arrow. If you really want to go wild you could have a total of TWENTY function keys by using CONTROL FUNCTION, SHIFT FUNCTION, and CONTROL SHIFT FUNCTION in the same way. It might be nice to have Ten function keys. I may try that sometime just for the fun of it. A corrected keyboard matrix diagram is provided, as well as a diagram of the delete key hardware and a keyboard socket diagram on the main board.

I can provide some information on the Quad Analog switches, but you are on your own if you decide to use them. I tried them on the TS1000 keyboard, and they did not work for me.

The keyboard is connected to the computer in the following manner. Using the QL service manual as a guide, remove the top cover, the micro drives and the main board. Solder the leads of a 25 wire ribbon cable to the pins of the keyboard sockets on the bottom side of the main board. The first nine wires on the left side of the cable go to the nine pin socket(J11), with pin #1 being the leftmost pin (the one closest to the expansion connector). The next 11 pins go to the 11 pin keyboard socket(J12), with pin #1 again on the left. The other end of the ribbon cable is attached to a DB25 socket, and the

match the computer.

On the TS2068 computer, ribbon cable was used to connect the keyboard to the computer, and there were no problems. You could probably do the the same on the QL if you wish. I did not do this as a shielded cable was available with the correct plug already installed.

Future plans for hardware include an I. B. M. style main case so the computer, the disc drives, the cooling fan and the power supply can be installed in the same box, as my computer is spreading out rapidly.

When the computer is installed in the P. C. case the top cover will be discarded, as the computer runs very much cooler without it, and heat problems no longer exist. The incident of parts failure should be much lower that way as well. That little box gets too hot in normal use(Sir Uncle Clive aways had a problem with heating, I hope his new machine has that problem solved).

Sincerely,

James J. Cook
180 E. Evan Hewes Hwy. Sp. #6
El Centro, Ca. 92243

DESKTOP HELPFUL HINTS

We are very much indebted to Joe Morris for his simple but overlooked advice on making it easier to import QUILL documents into DESKTOP PUBLISHER. All you have to do is to run your"install_bas" program from QUILL and set up a printer driver that only has a carriage return, not a carriage return and a linefeed which is what the default is. When you do this, and then enter QUILL, type your document and save it as a "lis" file, it will import into DESKTOP without any extraneous codes, etc. We thank Joe for bringing this to our attention.

So, what we do now is to set up in QUILL a "desktop" document which is our master. In this we set our page size to 25, our right margin to 60,left to 0 and indent to 8, without any footers or headers and with zero for the upper and lower margins. We can now prepare the copy from within QUILL which means we have the ability to word-wrap. SPELLBOUND works fine, plus we have all the commands such as "copy,""erase," etc. that DESKTOP does not offer. We now feel this is probably one of the best desktop publishing systems around when you consider it is only slightly over $300 and that includes the word-processing program, desktop program and the computer! Now, if they could make it laser printer compatible, it would be really unbelievable.

ZITASOFT PROGRAMS

Zitasoft has some new titles out we want to draw your attention to. A lot of you have heard of 4MATTER and LOCKSMITHE. LOCKSMITHE will allow you to make an identical copy of practically any microdrive original cartridge. You would, in a lot of cases, still need to first make a backup and have an original in drive two, but at least this way you can make an archival copy and keep your original safe. 4MATTER will allow you to make a disk version of protected microdrive software.

We want to stress that the use of LOCKSMITHE is to help end-users who have bought software protect their originals. It is not for blatant copying.

TOP VIEW

EXPANSION SLOT

HEAT SINK

1 9

1 11

MICRO DRIVES

J 11   J 12

DB25 SOCKET   FRONT

CONNECT DB25 SOCKET TO BOTTOM OF BOARD AT J11, J12

wire exits a slot in the front of the QL case. A metal L bracket is super glued to the bottom of the case, and it supports the DB25 socket, as there is no room to mount the socket in the case. Wire the cable to the keyboard to

SHRIVEL is a shrink program for your QL. The "auto_shrink" file is a basic program compiled with QLiberator and will allow you to install a RESET BOOT on any basic file. You will be asked the name of the file and the limit size of the machine. The limit size is the size that the auto shrink part of the new file will shrink to if the machine's valid ram size is greater. In other words, if you select 192k and your machine has been expanded up to 640k, then when you boot the file, the auto shrink appendage will check if the ram size is over the 192k and if it is, then the machine will report the immenent reset and then do it.

On any further boot of the same file, the auto shrink bit will again check ram size but it will now only see a 192k machine and the rest of the program will carry on from where it should.

As well as doing the above, all files that are doctor'ed using auto shrink will auto run. That means that even when loaded using the "LOAD" superbasic command, it will run as if you had "LRUNned" the file.

Most shrink programs will only allow you to shrink to a certain size and in doing so, they can both limit you un-necessarily and will not work in some instances. Some software will actually be short of memory if you have shrunk to 128k and have an interface that swallows memory.

SIDEWINDER is a MODE 4 MONO screen dump program. Upon booting, you may either edit the printer settings(baud,paper size, etc.) or go straight into the "Load/Save" menu for screens. After loading a screen, you are put into EDIT mode.

From this mode, you have the ability to alter the screen using either single keystroke or you may enter other modes that alter the screen's contents. At anytime during EDIT mode, you can press F1 and a brief description of the available commands will be displayed. You may, for example, scroll and pan the screen by single pixels. You can make a mirror image of the screen with even the text appearing "back to front." There is also a recolour option.
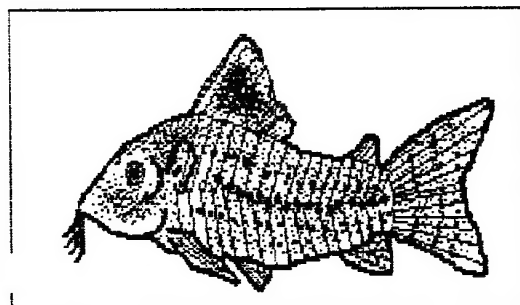
TOOLCHEST by Zitasoft will allow the user to "doctor" bad microdrive files, somewhat along the lines of Talent's CARTRIDGE DOCTOR. All of Zitsoft's programs are meant to be booted from mdv2_. We will keep you posted on more new software from this fine company as it becomes available.

We are going to close this month's issue with some more RLE pictures. Until next month, enjoy your QL.
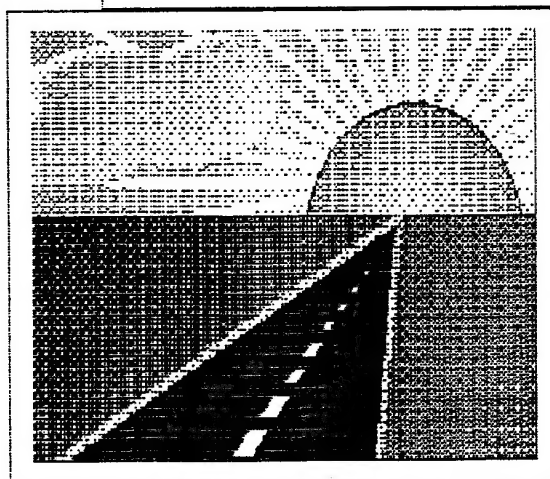

Mr. Scott

"A FISH"

Pictures downloaded from ComPuserve by Chuck Platt.

"CHRISTY"

"SUNSET"

✡✡✡
Editor's Note: All the pictures in this issue were print-
ed on a Sinclair QL printer(a Seikosha).